

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The Non-Final Office Action dated February 27, 2009 has been received and its contents carefully reviewed.

Claims 7-9 and 16-18 are hereby amended. Claims 4, 12 and 20-28 were previously cancelled. Accordingly, claims 1-3, 5-11 and 13-19 are currently pending. Reexamination and reconsideration of the pending claims are respectfully requested.

In the Office Action, claims 7-9 and 16-18 are rejected, as being indefinite for failing to particularly point out and distinctly claim subject matter. Claims 11-13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Naito (US Patent 6,462,735, hereinafter referred as Naito), and claims 1-3, 5-10, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Naito in view of Kang (U.S. Pub. No. 2002/0063666, hereinafter referred as Kang).

The rejection of claims 7-9 and 16-18 under 35 U.S.C. §112 is respectfully traversed and reconsideration is requested because the term “about” in claims 7-9 and 16-18 has been deleted.

The rejection of claims 11-13 and 14 under 35U.S.C. 103(a) as being unpatentable over Naito is respectfully traversed and reconsideration is requested.

Applicants respectfully submit that claims 11-14 and 19 are patentable over Naito. Claim 11 recites a method of driving an electro-luminescence display device comprising a combination of elements including, for example, “converting the Red, Green and Blue N-bit digital data signal having a same gray scale value into Red, Green and Blue M-bit digital data signals, respectively, wherein each of N and M is an integer, M is greater than N, and gray scale values of the Red, Green and Blue M-bit digital data signals are different from each other; converting the Red, Green and Blue M-bit digital data signals into Red, Green and Blue analog data signals, respectively”. As Applicants have presented above, claim 11, and claims 12-14 and 19 depend from claim 11 are patentable over Naito in view of Hasegawa. That is, none of the cited references including Naito and Hasegawa, singly or in any combination, teaches or suggests at least these features of the claimed invention because they fails to teach or suggest “converting the Red, Green and Blue N-bit digital data signal having

a same gray scale value into Red, Green and Blue M-bit digital data signals having different gray scale values”. Accordingly, Applicants respectfully submit that claims 11-14 and 19 are patentable over Naito in view of Kang.

The rejection of claims 1-3, 5-10, and 15-19 under 35 U.S.C. 103(a) as being unpatentable over Naito in view of Kang is respectfully traversed and reconsideration is requested.

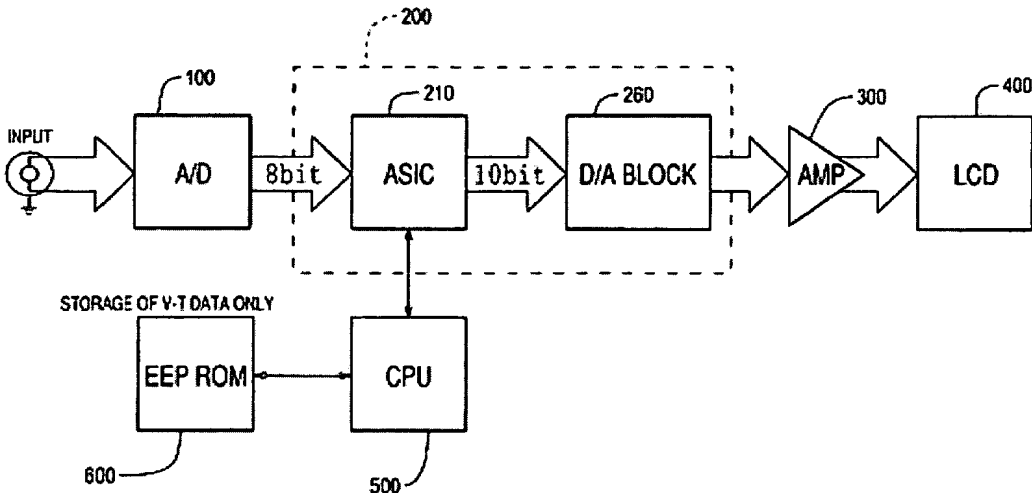
Applicants respectfully submit that claims 1-9 are patentable over Naito in view of Kang. Claim 1 recites an electro-luminescence display device comprising a combination of elements including, for example, “a data converter having a look-up table inputted with Red, Green and Blue N-bit digital data signals having a same gray scale value, the data converter converting the Red, Green and Blue N-bit digital data signals into Red, Green and Blue M-bit digital data signals respectively, referring to the look-up table, wherein each of N and M is an integer, M is greater than N, and gray scale values of the Red, Green and Blue M-bit digital data signals are different from each other; a gamma voltage generator generating a plurality of gamma voltages and converting the Red, Green and Blue M-bit digital data signals into Red, Green and Blue analog data signals, respectively”. As Applicants have presented above, claim 1, and claims 2-9 depend from claim 1 are patentable over Naito in view of Hasegawa, further in view of Kang. That is, none of the cited references including Naito, Hasegawa and Kang, singly or in any combination, teaches or suggests at least these features of the claimed invention because they fail to teach or suggest “a data converter converting the Red, Green and Blue N-bit digital data signal having a same gray scale value into Red, Green and Blue M-bit digital data signals having different gray scale values”. Accordingly, Applicants respectfully submit that claims 1-9 are patentable over Naito in view of Hasegawa, and further in view of Kang.

In the Office Action, the Examiner asserted that Naito discloses an electro-luminescence display device comprising: R, G and B cells having different light-emission efficiencies (see figure 3 and column 9, lines 48-53); a data converter (210 of figure 1) having a look-up table (see column 11, lines 16-23) with a N-bit (e.g. 8 bit) digital data signal having a same gray scale value (i.e. one of 0-255 is input); gray scale values of the Red, Green, and Blue M-bit digital data signals are different from each other (i.e. see figure 4- when a luminance of 128 is input for R, G and B, the T, G, and B, output values on the V-T curves are different from each other).

Firstly, Naito fails to disclose R, G and B cells having different light-emission efficiencies of the claimed invention. As shown in Fig. 3 and described in column 9, lines 48-53, Naito discloses the V-T characteristics of the liquid crystal devices for modulating each chromatic light. The V-T characteristics of the liquid crystal devices have mutually different transmittance characteristics between the colors, in which transmittance varies with the colors according to wave-transmittance characteristics. Naito can not have R, G, and B cells having different light-emission efficiencies as a self-emitting light source because the liquid crystal devices of Naito displays a picture by transmitting light from an external light source to color filters. That is, contents cited by the Examiner relate to the transmittance characteristics between the color filters. On the other hand, the R, G, and B cells of the claimed invention are self-emitting light source having different light-emission efficiencies, respectively. Accordingly, Naito fails to disclose R, G and B cells having different light-emission efficiencies.

Secondly, Naito fails to disclose a data converter having a look-up table with Red, Green and Blue N-bit digital data signals having a same gray scale value. A reference number 210 of Naito indicates ACICS 210 converting 8 bit digital data into 10 bit digital data. However, column 11, lines 16-20 of Naito cited by the Examiner describes that a conversion table of gamma correction characteristics as shown in Fig. 4 can be stored in the storage unit, the conversion table has a structure in which a picture signal is input as address data, and the data (DATA OUT) corresponding to the picture signal input (DATA IN) is stored in the storage area of the address, and is read out in response to address input so as to convert it into a gamma-corrected digital picture signal. That is, contents of Naito cited by the Examiner relates an EEPROM (600) storing gamma correction characteristics shown in Fig. 4 as a conversion table (see column 10, lines 66-67). Accordingly, Naito fails to disclose a data converter having a look-up table inputted with Red, Green and Blue N-bit digital data signals having a same gray scale value.

[Fig. 1 of Naito]



Lastly, the lookup table of the claimed invention differentiates the gray scale number of each of the R, G and B digital data signals (the Red, Green and Blue M-bit digital data signals) thereby meeting a white balance of the R, G and B cells having different light-emission efficiencies. However, it is not necessary for Naito to consider white balance of the R, G and B cells because Naito does not have the R, G and B cells having different light-emission efficiencies. In Naito, accordingly, Naito discloses that inputs for R, G, and B are different from outputs for R, G and B from each other, but fails to disclose that gray scale values of the converted Red, Green and Blue M-bit digital data signals are different from each other.

Accordingly, Applicants respectfully submit that claims 1 and 11, and claims 2-3, 5-10, and 13-19 dependent from claim 1 or 11 are patentable over Naito and Kang.

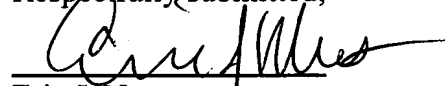
Applicants believe the application is in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

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Respectfully submitted,



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